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www.alsglobal.com

LABORATORY REPORT

July 24, 2015

Jake Janicek
Caerus Oil and Gas LLC
120 North Railroad Ave.
Parachute, CO 81635

RE: Federal 7-12C

Dear Jake:

Enclosed are the results of the sample submitted to our laboratory on July 10, 2015. For your reference, this analysis has been assigned our service request number P1502794.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Kelly Horiuchi at 1:47 pm, Jul 24, 2015

Kelly Horiuchi
Laboratory Director



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Client: Caerus Oil and Gas LLC
Project: Federal 7-12C

Service Request No: P1502794

CASE NARRATIVE

The sample was received intact under chain of custody on July 10, 2015 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Hydrogen Sulfide Analysis

The sample was analyzed for hydrogen sulfide per ASTM D 5504-12 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). This method is not included on the laboratory's NELAP, DoD-ELAP, or AIHA-LAP scope of accreditation.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlab.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	876241
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-001
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-15-6
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA01627201 4-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

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DETAIL SUMMARY REPORT

Client: Caerus Oil and Gas LLC
Project ID: Federal 7-12C

Service Request: P1502794

Date Received: 7/10/2015
Time Received: 10:15

ASTM D 5504-12 - H2S Bag

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	
Federal 7-12C	P1502794-001	Air	7/9/2015	10:45	X

**ALS Environmental
Sample Acceptance Check Form**

Client: Caerus Oil and Gas LLC

Work order: P1502794

Project: Federal 7-12C

Sample(s) received on: 7/10/15

Date opened: 7/10/15

by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- | | Yes | No | N/A |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 Were sample containers properly marked with client sample ID? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 Container(s) supplied by ALS ? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 Did sample containers arrive in good condition? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 Were chain-of-custody papers used and filled out? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 Did sample container labels and/or tags agree with custody papers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 Was sample volume received adequate for analysis? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 Are samples within specified holding times? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 Was proper temperature (thermal preservation) of cooler at receipt adhered to? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9 Was a trip blank received? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10 Were custody seals on outside of cooler/Box? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Location of seal(s)? _____ Sealing Lid? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Were signature and date included? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Were seals intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Were custody seals on outside of sample container? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Location of seal(s)? _____ Sealing Lid? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Were signature and date included? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Were seals intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11 Do containers have appropriate preservation , according to method/SOP or Client specified information? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Is there a client indication that the submitted samples are pH preserved? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Were VOA vials checked for presence/absence of air bubbles? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12 Tubes: Are the tubes capped and intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Do they contain moisture? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 13 Badges: Are the badges properly capped and intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Are dual bed badges separated and individually capped and intact? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1502794-001.01	1 L Zefon Bag					

Explain any discrepancies: (include lab sample ID numbers): _____

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RESULTS OF ANALYSIS

Page 1 of 1

Client: Caerus Oil and Gas LLC
Client Project ID: Federal 7-12C

ALS Project ID: P1502794

Hydrogen Sulfide

Test Code: ASTM D 5504-12
Instrument ID: Agilent 7890A/GC22/SCD
Analyst: Mike Conejo
Sample Type: 1 L Zefon Bag(s)
Test Notes:

Date(s) Collected: 7/9/15
Date Received: 7/10/15
Date Analyzed: 7/10/15

Client Sample ID	ALS Sample ID	Injection	Time Analyzed	Result	MRL	Result	MRL	Data Qualifier
		Volume ml(s)		$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	ppbV	ppbV	
Federal 7-12C	P1502794-001	1.0	10:27	310	7.0	220	5.0	
Method Blank	P150710-MB	1.0	07:42	ND	7.0	ND	5.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: Caerus Oil and Gas LLC
Client Sample ID: Lab Control Sample
Client Project ID: Federal 7-12C

ALS Project ID: P1502794
ALS Sample ID: P150710-LCS

Test Code: ASTM D 5504-12
Instrument ID: Agilent 7890A/GC22/SCD
Analyst: Mike Conejo
Sample Type: 1 L Zefon Bag
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 7/10/15
Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount ppbV	Result ppbV	% Recovery	ALS Acceptance Limits	Data Qualifier
7783-06-4	Hydrogen Sulfide	1,990	2,270	114	65-138	